Appendix 2
Outcome Calculation Methods

Improving Existing Surveillance Methods

Goal 1, Objective 1
At least 95% of persons reported with TB disease or suspect TB will have been identified and referred for tuberculosis related medical evaluation within 72 hours of initial contact with a health care provider or any other identified in the action steps that follow.

Calculated by comparing the date patient first had contact with a health care provider (or other) for TB-related symptoms (cough, hemoptysis, night sweats, etc.) and date patient was referred for a TB-related medical evaluation (skin test, chest x-ray, sputum collection, etc.)

Goal 2, Objective 1
At least 95% of all TB suspect case reports will be received within 24 hours by the local health officer or the Wisconsin TB Program when one or more of the following indicators are present…

Calculated based on difference between time of report and time "indicator" occurred.

Goal 2, Objective 2
…There will be at least 95% completeness for CDC selected variables.

Calculated based on the percent of patient records with no results or "unknown" in specified fields. Patient records are classified as "complete" or "incomplete" by reviewing each variable. One "incomplete" variable renders the record incomplete.

Goal 2, Objective 3
The Wisconsin TB Program and LHDs will actively work with infection control practitioners (ICPs) in Wisconsin health care facilities to promote the most current TB prevention/education standards within their facilities and in their shared communities.

Progress toward completing action steps will be monitored. Achievement of objective will be based on completion of all action steps.

Goal 3, Objective 1
The Wisconsin State Laboratory of Hygiene (WSLH) will perform DNA fingerprinting on 95% of initial TB isolates within 4 months of receipt.

Calculated using WSLH turnaround time tracking of specimen receipt to reporting of results.

Goal 3, Objective 2
At least 80% of any unusual occurrence of TB disease in Wisconsin will be investigated using all available resources to define epidemiological and relational links.

Outcome calculation will be postponed until completion of Action Step 1.

Goal 4, Objective 1
All diagnosed cases of active tuberculosis disease will be reported to the Wisconsin TB Program.

Calculated based on periodic completeness of reporting studies of laboratory data, death certificates, and other sources.

Goal 4, Objective 2
At least 80% of people receiving skin testing by LHDs will have an identified medical or population risk factor.

Calculated using data collected at the local level. Local health departments will classify skin testing activities due to “medical risk factor,” “population risk factor,” or “administrative” reasons.

Goal 4, Objective 3
LHDs will conduct appropriate surveillance for TB disease and LTBI.

Progress toward completing action steps will be monitored. Achievement of objective will be based on completion of all action steps.

Improving Disease Treatment Methods

Goal 5, Objective 1
At least 90% of all reported cases of tuberculosis disease will complete an ATS/CDC recommended regimen of TB drug therapy within 12 months.

Calculated based on the number of people starting therapy vs. the number of people completing therapy within 12 months. Persons who die before completing therapy, have rifampin-resistant tuberculosis, or are children (under 15 years old) with meningeal or bone and joint TB are excluded from the calculation. Time to complete is calculated as the number of days from start of medication to stopping of medication.

Goal 6, Objective 1
Drug susceptibility testing will be performed on the initial isolates of at least 95% of patients with culture confirmed tuberculosis.

Calculated based on the number of patients with reported drug susceptibility results vs. the number of patients with positive TB cultures.

Goal 7, Objective 1
Summary data from completed cases will reflect care given and documented according to state and national objectives.

Calculation will be based on DOT, culture conversion, and repeat drug susceptibility results recorded in the RVCT and the follow-up chest x-ray, adherence efforts, and compliance documentation recorded in case review notations.

Goal 7, Objective 2
By completion of therapy, 95% of active TB cases with pulmonary involvement will have documented:

- *sputum specimen collections to verify culture conversion,*
- *CXR improvement and*
- *interventions and evaluations of treatment adherence emphasizing DOT.*

Calculation will be based on DOT, culture conversion, and repeat drug susceptibility results recorded in the RVCT and the follow-up chest x-ray, adherence efforts, and compliance documentation recorded in case review notations.

Goal 7, Objective 3
By completion of therapy, 95% of active TB cases …with no pulmonary involvement will have documented…

Calculation will be based on DOT, repeat drug susceptibility results recorded in the RVCT and the follow-up chest x-ray, adherence efforts, and compliance documentation recorded in case review notations.

Goal 8, Objective 1
For at least 80% of initial diagnostic specimens received by the laboratory for TB diagnosis, the following laboratory turnaround times will be met…

Laboratories will track time from specimen receipt until results are reported. Private labs will report results through the laboratory network. WSLH will report their own results and an aggregate of laboratory network results. Mycobacteria not likely to be pathogenic (*M. gordonae*) will be excluded from the identification turnaround time.

Improving Case Prevention Methods

Goal 9, Objective 1
95% of persons reported with confirmed or suspected infectious tuberculosis will be placed in air-borne precautions and started on ….within 3 days.

Calculated based on time start of medication and isolation and occurrence of indicator.

Goal 9, Objective 2
For each case of active TB disease in Wisconsin, an analysis will be performed to identify missed opportunities for disease prevention for the purpose of developing elimination goals.

The number of cases of reported TB will be compared to the number of cases receiving a “missed opportunity” analysis.

Goal 10, Objective 1
Contacts will be identified for at least 90% of sputum smear positive TB cases.

Calculated based on receipt of contact investigation report.

Goal 10, Objective 2
95% of close contacts to an individual with active TB disease of the respiratory tract will be clinically evaluated and tested within 3 weeks after being identified as a contact to the confirmed case.

Date contact identified will have to be collected and time from identification to evaluation calculated.

Goal 10, Objective 3
Unless medically contraindicated, treatment of newly identified LTBI will begin for 95% of contacts < 15 years old and 75% of contacts ³ 15 years old.

Reason for not beginning treatment will need to be collected to determine who should be excluded from the calculation.

Goal 10, Objective 4
85% of contacts started on treatment…will complete…

Based on TB Program data comparison of number of contacts with newly identified LTBI placed on therapy vs. number that completed. There will be no exclusions, but reasons for not completing will be sought and analyzed.

Goal 10, Objective 5
The Wisconsin TB Program will evaluate all contact investigation information submitted and provide status reports to LHDs annually.

Based on a "done" vs. "not done" checklist format.

Goal 11, Objective 1
75% of those placed on LTBI … will complete…

Based on TB Program data comparison of the number of persons placed on therapy vs. the number completing therapy. There will be no exclusions, but reason for not completing will be sought and analyzed.

Goal 12, Objective 1
LHDs will identify populations in their jurisdiction at risk for TB disease and LTBI.

Based on completion of action steps.

Goal 12, Objective 2
LHDs will promote evaluation of high-risk populations for TB disease and LTBI.

Based on completion of action steps.

Goal 12, Objective 3
LHDs will promote treatment of populations at risk for LTBI and TB disease.

Based on completion of action steps.

Improving Case Prevention Methods

Progress toward meeting goals and objectives will be based on completion of action steps.